

MAY 15 1920

THE RHODE ISLAND MEDICAL JOURNAL



Owned and Published by the Rhode Island Medical Society. Issued Monthly

VOLUME III }
NUMBER 5 } Whole No. 128

PROVIDENCE, R. I., MAY, 1920

PER YEAR \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES

Analysis of 100 Deaths from Diphtheria. Dennett L. Richardson, M.D.	87
Discussion of Dr. Richardson's Paper	90
Discussion of Papers by Herman O. Mosenthal, M.D. and James P. O'Hare, M.D.	91
Discussion of a Paper Entitled "Acute Nephritis in Children" Louis Webb Hill, M.D.	92
Posterior Positions of the Occiput and Their Management Herbert G. Partridge, M.D.	93
Discussion of Dr. Partridge's Paper	97

EDITORIALS

The Milk Campaign	98
The Workings of the Maryland Plan	99
The Council of Medical Education	99

SOCIETY MEETINGS

Washington County Medical Society	100
Providence Medical Association	100

HOSPITALS

Memorial Hospital	100
Rhode Island Hospital	100
St. Joseph's Hospital	101

MISCELLANEOUS

Dr. William J. Burge. On His 89th Birthday. William R. White, M.D.	101
Cancer is Increasing	102

ENTERED AS SECOND-CLASS MATTER AT THE POST OFFICE AT PROVIDENCE, R. I., UNDER ACT OF MARCH 3, 1879



Glandular Insufficiency

WHEREVER there is glandular insufficiency, diagnose the case and prescribe the rational treatment, specify ARMOUR'S and get Endocrine Gland Preparations that are dependable.

No "ready-made" medicines will fit all cases. Therefore we are not offering "shot gun" combinations, but depend upon the physician to prescribe Thyroids, Corpus Luteum, Pituitary, Suprarenal, Thymus, Ovarian and other substances in such quantity or combinations as he may consider indicated. We supply tablets containing normal doses of each glandular substance for dispensing.

The Endocrine Gland Products under the Armour label are made from fresh material which is dried in vacuum ovens at low temperature to prevent injury to active principles.

Armour's Surgical Catgut Ligatures, plain and chromic, Emergency (20 inch) and Regular (60 inch) lengths are smooth, strong, sterile—"just what a ligature should be."

Literature to Physicians on Request

ARMOUR AND COMPANY
CHICAGO



A WOMAN can drive the Cadillac in ease and comfort without worrying about what's going on under the hood. That the wives and daughters of Cadillac owners appreciate this, is evidenced every day on our city streets and country roads.

Cadillac Auto Company of Rhode Island

ARTHUR J. FELTHAM, Manager

9 FEDERAL STREET, PROVIDENCE, R. I.

Goodyear Cord Tires

Tire Repairing

CORP BROS.

40 Mathewson St. Providence, R. I.

John A. Gammons

ALL KINDS OF

INSURANCE

PHYSICIANS LIABILITY A SPECIALTY

171 Westminster St., cor. Dorrance

"Behind the Clock"

THE RHODE ISLAND MEDICAL JOURNAL

The Official Organ of the Rhode Island Medical Society
Issued Monthly under the direction of the Publication Committee

VOLUME III }
NUMBER 5 } Whole No. 128

PROVIDENCE, R. I., MAY, 1920

PER YEAR \$2.00
SINGLE COPY 25 CENTS

ORIGINAL ARTICLES

ANALYSIS OF 100 DEATHS FROM DIPHTHERIA.*

By DENNETT L. RICHARDSON, M. D.,
Providence, R. I.

In 1917 there were 12,453 deaths from diphtheria in the Registration Area of the United States which area includes 72.7% of the total population and if the death rate among people living outside this area was as high,—doubtless it was higher,—there must have been 17,114 deaths from this disease in the continental United States in 1917.

It is quite evident that diphtheria is still a great menace to child life, although we have flattered ourselves that the disease is being stamped out.

During the years 1895-1896 the use of cultures and antitoxin in combatting diphtheria was introduced into the larger cities of the United States. Immediately there was a sudden apparent increase in the number of cases. This was of course not true. It indicated that by the use of cultures many cases formerly not recognized were being diagnosed as diphtheria. In other wards the diagnosis previous to this time was haphazard.

No matter how many cases of diphtheria a clinician may have seen, he cannot always pick out diphtheritic throats from physical appearance nor from the character of the symptoms. This is particularly true of the early diagnosis which is of so very great importance if we expect to cure patients. You and I were taught the classical picture of diphtheria and were led to believe that all cases must conform to this picture. No acute infectious disease always presents a typical clinical syndrome and the sooner medical students are impressed with this fact the better work will they do. As a

matter of fact, sore throats with or without exudate or pseudomembrane may be due to a diphtheritic process and may escape recognition unless cultures are taken.

Cultures should be taken of every sore throat especially if there is swelling or exudate. I wish to warn that many a physician has made the mistake of waiting for the report on the culture or depending on that one culture for a diagnosis. It is important to take cultures but it is also of great importance many times not to wait for the report before giving antitoxin; nor should it be withheld in spite of a negative report if the process is increasing and better judgment tells you that it may be diphtheria. Don't let the family nor your own inclinations argue you out of a tentative or positive diagnosis. Antitoxin is harmless except in very rare instances. From the year 1900 to 1917 the death rate in the Registration Area dropped consistently and gradually from 46 to 16.7 per 100,000. This drop is gratifying but it is by no means what it should be. As a matter of fact, about three years ago the virulence of diphtheria in Providence increased and I find, too, that in Philadelphia increased virulence was noted about the same time. It is quite possible that the mortality rate during the next few years including the last three will be higher than for many years.

Most physicians have been deceived in estimating the successful results of antitoxin by the great drop in fatality since its introduction. It so happens that cultures and antitoxin were introduced at the same time and a considerable part of the fall in fatality rate was due to the inclusion as diphtheria of many cases previously not included. This conclusion is further substantiated by the contrasted slow and gradual decrease in the total death rate.

Some interesting facts are revealed in the review of 100 consecutive deaths at the Providence City Hospital of patients suffering from faucial or naso-faucial diphtheria. Laryngeal

* Read before the Rhode Island Medical Society
March 4, 1920.

cases have purposely been omitted as they present a different problem.

The deaths will be reviewed from the standpoint of age, total duration of illness, duration of illness before admission, extent of the process and complications. Age is an important factor in prognosis.

THE AGES OF THE 100 PATIENTS:

Under 1 year.....	1	10 to 14 years.....	12
Under 5 years.....	43	19 years.....	1
5 to 9 years.....	42	20 years.....	1
	31 years.....		1

It is evident from these figures that few children die under one year of age. The highest mortality is from 2-10 years and practically all deaths are in children under 15 years of age. Adults do occasionally die.

The total duration of illness of these patients reveals some rather interesting facts.

TOTAL DURATION OF ILLNESS:

3 days or less	13	
4 to 7 days.....	30	43 first week.
7 to 14 days.....	45	Second week.
14 to 20 days.....	6	Third week.

One each 21-23-30, 40 and 39 days respectively.

It is evident that about 90% of the deaths occurred during the first two weeks. The deaths are about equally divided between the first and the second week. In other words if a patient survives the two weeks period he is practically sure of getting well.

Clinically we observe two classes of cases. The first are those who are admitted in desperate condition and die during the acute process of the disease. The second group includes cases which are serious when admitted, but the local throat condition and temperature reaches normal and the patients seem to be surely getting well only to die near the middle of the second week from circulatory failure. The later deaths are usually in patients who develop extensive paralysis.

Very few of the patients had received antitoxin before admission.

DAYS OF ILLNESS AT THE TIME OF ADMISSION:

1 day.....	18	5 days.....	6
2 days.....	22	6 days.....	5
3 days.....	29	7 days.....	2
4 days.....	12	8 days.....	2

On each 10-12-21 days.

While the above figures were carefully taken from our records I do not believe that many patients die within 48 hours of the onset of the disease. Diphtheria is insidious in onset and children do not suffer from sore throat as do adults. They attempt to conceal it and since constitutional symptoms do not come on abruptly as in scarlet fever the parents overlook the condition and sometimes do not call a doctor until there is swelling in the neck, when it is perhaps too late. I find that parents under such circumstances do not know or conceal the date of onset when they are told the seriousness of the child's condition. The last table shows that 80% had been sick three days or less. It must be obvious to any one that early treatment is of paramount importance. Delay has been due to two factors, failure of the parents to call a physician and secondly failure of the physician to make a diagnosis and act promptly. If a physician is called to see a case of acute appendicitis he will not let the day go by without seeing that patient a second time if he does not recommend immediate operation. It is just as important to see a suspicious throat case a second time the same day and administer antitoxin if clinical findings warrant. If he does not go back for 24 or 48 hours he may have sealed that child's doom. Neither should he wait for cultures in the face of clinical signs, nor can he hide behind the alibi "The patient had negative cultures".

It so happens that antitoxin does not stop the process in all virulent cases even though it is given early. We once had a nurse who was given antitoxin a few hours after the onset of diphtheria, yet the process went on to extensive involvement and she barely escaped with her life even though large doses of antitoxin were given.

Practically all the antitoxin in this country is made from Park 8 strain. This organism was isolated by Dr. Park some twenty-five years ago from a diphtheria carrier. It is a powerful toxin producer but animals cannot be successfully inoculated with the organisms. It possesses virulence but not aggressivity. I do not know whether or not the criticism I am offering is correct, but I have felt for some time that antitoxin is not accomplishing all that it should and have wondered if monovalent

antitoxin should be relied upon. For instance, in the case of epidemic cerebro-spinal meningitis, multiple strains are of so much importance in the preparation of serum. Meader of Johns Hopkins is working on the problem now and while nothing so far has been published his experience has rather borne out this contention.

It is of much importance to be able to predict when called to treat a case whether the patient will recover or die.

The extent of the process is of much value in making prognosis and oedema in the neck and throat is the very best guide.

OEDEMA OF THE NECK IN 100 FATAL CASES:

Unilateral oedema of the neck.....	18
Bilateral oedema of the neck.....	59
Small, moderate or no swelling.....	23

Seventy-five per cent. showed either unilateral or bilateral oedema on admission. Of the remaining 23, antitoxin failed to check the progress or the neck had been swollen before admission.

This oedema differs from swelling due to palpable glands or cellulitis seen in other throat conditions, has not been emphasized sufficiently. In a very virulent case I have seen boggy oedema as far down as the sternum and upper thorax. It develops rapidly and subsides rapidly, scarcely ever resulting in abscess formation.

These figures have confirmed a general impression which we have held for several years, namely, that any child under 10-12 years of age with marked bilateral oedema of the neck, when first treated, will die whether he receives antitoxin or not. We never withhold antitoxin and give such cases large doses. Once in a great while perhaps we save a life.

Another guide to determine the seriousness of the case is the rapidity of onset. If the throat shows very great increase in swelling and exudate within a few hours it is quite evident that you are dealing with a virulent infection, and prompt and sufficient treatment should be given.

In 40 per cent. of the cases the process was confined to the throat. In 60 per cent. the

process involved the nose. The prognosis in well defined naso-facial diphtheria is very high.

Death in diphtheria is usually due to circulatory failure. This is particularly well seen in the deaths which occur during the second and third weeks at a time when the acute symptoms have entirely subsided.

COMPLICATIONS OF 100 DEATHS:

Pneumonia	5
Myocarditis	40
Respiratory paralysis	1
Heart block	7
Acute nephritis	11
No complication	43
Paralysis	4

All those with no complications undoubtedly died chiefly from circulatory failure although myocarditis did not appear in the history.

STUDY OF THE URINE:

No specimen	40
Negative	14
S. P. T.	12
S. T. or more	34

Albuminuria early in the disease or at any time is less frequent than in many acute diseases. This is well shown in the table of fatal cases—only thirty-four cases out of sixty showed anything which would indicate an acute nephritis, and of one hundred cases only eleven showed urinary findings, which with the symptoms would suggest a diagnosis of nephritis. It is my own opinion that the signs in the urine are only secondary to the vaso-motor breakdown. Two cases with partial or quite complete suppression of urine came to autopsy. Macroscopically they showed no evidence of acute nephritis. I have not seen at the hospital a single case of general oedema in a diphtheria patient which would indicate an acute parenchymatous nephritis.

Contrary to almost all acute diseases diphtheria presents a falling temperature and pulse curve up to death. In fact, neither are so high as in other diseases, and the general tendency is downward whether the patient has had treatment or not. Many of the fatal cases enter with a temperature of ninety-nine or one hundred. Temperature is then of little significance; neither is rapidity of pulse. But

irregularity or marked showing of the pulse is of serious importance.

PROGNOSIS: In determining prognosis one has to consider the rapidity of onset of the disease, the age and chiefly the amount of oedema, particularly in the neck. Any child under ten to twelve years of age with bilateral oedema of the neck when first seen will nearly always die. Death may take place during the acute process or after this has subsided and the patient seems to be quite recovered; but usually occurs within two weeks of onset of the disease.

TREATMENT: Antitoxin should be given freely to cases of sore throat whether you are sure of your diagnosis or not.

It should not be postponed many hours and certainly not a day or longer.

It should always be given either intra-muscularly or intra-venously. In most cases the intra-muscular method is rapid enough, but in cases with swelling in the neck and marked signs in the throat, it should be given intra-venously and intra-muscularly. After intra-muscular administration antitoxin reaches the blood in considerable quantity in about eight hours, whereas when given subcutaneously two or three days are required. This fact may explain unsatisfactory results of the past because antitoxin has usually been given subcutaneously.

Antitoxin will not save all, even when given early, but the number of failures would be very small compared with the number who die each year from the disease under present conditions.

DISCUSSION OF DR. RICHARDSON'S PAPER.

DR. DENNETT L. RICHARDSON, Providence, R. I.—Patients do recover after heart block. We have one such occasionally. It does not mean that if the child develops heart block that he will die. If the heart is going to fail, it does not make any difference what is done. We have used everything in the way of stimulation, and I do not believe that anything is of avail. Just what the process is that goes on has not been established. The heart is depressed. This is due to the toxin

either of the heart muscle itself, or to the innervating mechanism. In addition to that there is very low blood pressure. The patients die may be hours, sometimes as long as twenty-four hours, after they have been pulseless. They die slowly. At autopsy there is only one characteristic finding in the organs. Every organ is perfectly pale, like that seen in pernicious anemia; not yellow but dull white. We have tried everything for supporting the circulation. We have tried pituitrin, adrenalin chloride, and digitalis but with no particular effect. When a patient begins to vomit, unless you can trace it to a medicine, or food, you can be pretty sure that you will lose the patient. We give them saline by rectum and keep them full of morphine. Stimulation has no effect. There have been some attempts to correlate the different types of diphtheria germs with virulence. As far as I know, the rapid onset of the disease and the extent of the process are the best indications of virulence. I have not looked up the virulence in other parts of the country. Last October, while I was in Philadelphia, I visited one of the hospitals and the superintendent told me that three years ago the mortality from diphtheria increased and the general run of cases was more severe. So I judge that high mortality is not only here. I have seen reports from one or two other places where the virulence has increased. It is happening now in spite of our modern methods of treatment.

The dose of antitoxin is rather variable. If a child has a little membrane on one side of the throat with a temperature of 101 or 102, 5000 units may be sufficient. If both tonsils are involved we usually give from 10,000 to 20,000 units. The initial dose is the dose most important. Whether you repeat it or not depends on the progress. If the disease is extensive it ought to be repeated, but it is the first dose that does the most good. In severe cases we give 20,000, 30,000 or 40,000 units, depending on the severity of the case rather than the age of the patient. To children two or three years of age we do not give quite as much as an adult. In those cases it is our practice to give a child antitoxin intravenously and intra-muscularly at the same time. Then ordinarily we do not repeat it intravenously. How long

the antitoxin given intravenously keeps up its therapeutic process I do not know but anyway the intramuscular dose will reach the circulation in quantity in eight hours. After a lapse of twelve or eighteen hours you can repeat the intramuscular dose.

DISCUSSION OF PAPERS BY HERMAN
O. MOSENTHAL, M. D., AND JAMES
P. O'HARE, M. D.

(The papers are not available for publication.)

DR. FRANK T. FULTON, Providence, R. I.—I would like to repeat what Dr. Richardson has just said, that we are indeed fortunate in having Dr. Mosenthal and Dr. O'Hare present papers to us to-night. Each is an authority on the subject. They are not only internists but investigators and consequently their opinion has unusual value.

During the reading of the papers I have thought of a number of things which I might bring up in the discussion only to have the speaker later touch upon these particular things himself.

Dr. O'Hare has given a very clear exposition of essential hypertension, a condition more or less familiar to us all, and I am sure much clearer in our minds than previous to hearing his paper. He very properly emphasizes the fact that the diagnosis commonly rests with the general practitioner and if the cases are to be early recognized it must be through him.

It has been generally supposed, both by the laity and by many physicians, that if one has arterial hypertension, his expectation of life is comparatively short. I think it important to recognize that many of these cases live a long time if they are able to live under conditions which are at all favorable. There comes into my mind at this moment two patients who have been under my observation a long time, one of them for thirteen years, who, when first observed, had a blood pressure of 180 and who is still living and in fair health. Her blood pressure is now rather higher, as high as 220 s, 120 d having been observed. It is especially noticeable that she was only forty-five years of age when first seen, for in my opinion the younger these cases are the worse the prognosis. The other I first saw ten years ago when her blood pressure was 200. She is now about seventy

years of age and rather feeble on account of her arterial disease. Again, only to-day, a woman fifty-four, wife of a physician, came into my office with a history of having had, twelve years ago, haemorrhagic retinitis due to arterial disease. Her blood pressure now is 190 s, 100 d. She has some symptoms due to hypertension but on the whole is a very active woman. Still another instance, not under observation so long but probably of very long duration, is a patient whom I saw in my office once, four years ago, who had at that time a systolic pressure of 230, diastolic of 130. I had not heard of her since until the other day when she had her first cerebral accident. How long she had the hypertension before I saw her no one knows, but I venture to say a good many years.

Dr. O'Hare also spoke about the variability of the blood pressure in hypertension cases. I wish to emphasize everything which he said about that for I know it is not commonly understood how much variation may occur from day to day or, for that matter, from hour to hour. I see a good many cases of this type who have been under observation elsewhere for a longer or shorter length of time. Many of these patients ask to know what their pressure measures. If it happens to be five or ten points above the previous observation they are greatly depressed, if it happens to be five or ten points below they are correspondingly elated, it does not seem to me wise to make a practice of telling a patient his blood pressure. There are, of course, exceptions to this but unless there is some good reason for an exception I make it a rule not to tell a patient figures unless he has had figures told to him previously and I find it difficult to evade the question. The reason is that the patient draws his own conclusions from the figures rather than allowing his medical adviser to form judgment for him and give him advice accordingly. Patients who have hypertension would have much more comfort of mind and if handled properly would be just as amenable to treatment if figures were not given to them.

Dr. O'Hare commented upon an excellent method of recognition of alternating pulse. I think there should be a word of caution about that. The true alternating pulse is a pulse which alternates in force but which is evenly spaced. By listening below the cuff of the

blood pressure instrument one might readily confuse this with a pulse showing alternating ventricular extra systoles, this latter condition being rather more common than alternating pulse but easily recognized from it by the fact that the ventricular beats are not evenly timed.

DISCUSSION OF A PAPER ENTITLED "ACUTE NEPHRITIS IN CHILDREN."*

By LOUIS WEBB HILL, M. D.,
Boston, Mass.

(The paper is not available for publication.)

DR. HAROLD G. CALDER, Providence, R. I.—
In the main I agree so thoroughly with Dr. Hill that there is not much opportunity for a discussion. On the other hand there may be a few additions or a few places where I can emphasize certain things he has indicated.

We ought to be particularly careful about prophylaxis. Remembering that throat infections constitute the largest cause of nephritis, we should be as careful in diet and treatment in acute throat infections as in scarlet fever. That is something that I think most of us are apt to neglect. We ought to omit the meat extractives and soups and eggs altogether. In other words, put the child on a nephritic diet before nephritis appears.

During the course of acute nephritis, I want to emphasize that an exclusive milk diet is not a good thing, as the protein intake is apt to be higher than is needed for that child. Starches and fats do not do the kidneys any harm at all. I never could see why we should cut down fluids to the absolute minimum amount in edema. I find in my experience that if we limit the amount of water to the child's thirst requirements we get along very nicely if there is no salt in the diet.

In regard to the tests, it seems that we ought to use caution. I think we can get along without any of them pretty well. The last one Dr. Hill mentioned about fixation of gravity is a valuable aid in the diagnosis of early chronic nephritis but in acute cases I should rather not use the test.

In the cases that do not do well, the first

uremic symptoms are poor appetite and vomiting. We get these before drowsiness or convulsions. I think that we are justified in using diuretics in those conditions unless the case is a very acute one. I should use diuretics derived from caffeine and tea.

In regard to the diagnosis, I think it is important to remember that there are some cases of acute nephritis which are comparatively blind until the urine has been examined. Most of us are apt to think of pyelitis in any case of unexplained temperature in a baby. In older children also we sometimes find acute nephritis when there has not been any special symptom except fever to call our attention to the condition.

DR. W. P. BUFFUM, JR., Providence, R. I.—
It has been a great pleasure to all of us to hear Dr. Hill, especially as there has been so little work done on nephritis in children.

I am going to take the liberty to disagree on one point. There has been in the past, a good deal of confusion about the proper amount of protein for the diet in acute nephritis. It should vary a great deal in different types of cases and in different stages of certain cases. When there is retention of non-protein nitrogen in the blood, protein should be omitted from the diet as far as possible, and carbohydrate should be given liberally to spare the body protein. By this course, which must be given for only a short period, protein metabolism is kept at its lowest level, and the least possible tax is placed on the weakened function of the kidney. Also there is evidence that this lessens the likelihood of uremic manifestations developing.

The question then comes up as to when to use this extreme diet. I don't see any reason why we should not do either a blood nitrogen or a phenolphthalein test on a child when the severity of the case warrants it. In the absence of these tests, it is best to assume that any case with uremic symptoms has nitrogen retention. In cases where this retention does not exist, or in cases where it persists, sufficient protein must be given to meet the bodily requirements. Such a low protein diet sometimes causes or increases edema, and this must be kept in mind.

*Read before the Providence Medical Association
April 5, 1920.

About salt in the diet, salt retention is probably the chief cause of edema and the salt intake should be reduced if this is present. This course alone will clear up the edema in most cases.

It has been found by Fitz and others that convulsions occur in certain cases where the nitrogen retention is slight and the chloride retention is marked, indicating that these so-called uremic manifestations may be caused by the failure to eliminate salt.

About the management of these cases after the more severe symptoms have subsided, it is a considerable problem to know what to do. Protein should probably be given in sufficient amounts to keep the hemoglobin up. I think it is well to keep the patient in bed for several months, if the albumin and casts persist for that length of time. Certain cases after showing little improvements for two months or so, will then clear up rapidly.

DR. HERBERT TERRY, Providence, R. I.—I should like to ask a question. Dr. Hill said that he has seen Edebohl's operation do a very good deal of good. He also said that he never has seen Edebohl's operation do any harm, and yet he advises Edebohl's operation as a very last resort. It seems to me that Edebohl's operation would be a very good thing to do before the patient reaches a moribund stage.

DR. ANTHONY CORVESE, Providence, R. I.—I would like to emphasize what Dr. Hill said in regard to the hemorrhagic type of nephritis. Three weeks ago I saw a young man of nineteen years with a cold, rhinitis and sore-throat. He also complained of bloody urine and some pain in both kidneys. He was not sick at all. I examined him and found some tenderness in the costovertebral angle on both sides. On examination I also found blood in two or three fields. I told him to go home and go to bed, put him on a diet, and had an X-ray taken. In three days he came back. I feel now that this was a case of hemorrhagic nephritis and I did not examine enough of the casts. His condition cleared up. I believe now that it was hemorrhagic nephritis. I should like to ask Dr. Hill's opinion on the etiology in that case.

DR. JAMES S. MOORE, East Providence, R. I.—I would like to express my appreciation on this

paper which informs me of the fact that the specific gravity seems to be highest in the night. I should like to inquire if the gravity is lowest in the afternoon. I have observed in examining urine that the gravity is lower in the afternoon. In these hemorrhagic types of nephritis of which I have run across several recently I have advised them to be put to bed and some, after a short time, seem to recover. After they get up they often have to return. In a few days the urine in the blood disappears. It occurs this way for several weeks, and I have inferred that there was little injury to the kidney itself as the children do not seem sick.

Dr. Hill has spoken about acute nephritis and its treatment. He did not mention whether he would advocate the removal of the diseased tonsils. I would like to know if he advises their removal and at what time he would advise doing it.

DR. FRANK T. FULTON, Providence, R. I.—I think the subject has been very well covered and discussed. I appreciate hearing this paper by Dr. Hill and I know that you all have enjoyed it. I think that most of the points that I had in mind have been covered in discussion. I feel as Dr. Hill does in reference to the functional test. They certainly have a value.

POSTERIOR POSITIONS OF THE OCCIPUT, AND THEIR MANAGEMENT.*

By HERBERT G. PARTRIDGE, M. D.,
Providence, R. I.

One of the most important conditions in obstetrics, and one which has not received the attention which it deserves, is that of posterior positions of the occiput. Its importance is evidenced by its frequency, and the dangers to both mother and child; its neglect, by the fact that no paper upon this topic has been read before this Society, during its entire history. Moreover, a large percentage of cases of difficult labor, in hospital, private practise, and especially in consultation, are due to this cause. A consideration of this subject may well be, therefore, of more value than that of almost any other topic in obstetrics.

FREQUENCY—Williams states that the percentage of occipito-posterior positions in the Johns

* Read before the Rhode Island Medical Society, March 4, 1920

Hopkins Hospital was 11.3% Cragin, reporting from the Sloane Maternity gives a percentage of 11.05%. In the Providence Lying-in Hospital, in 13,000 cases there were 1332 cases of right posterior position, or 12.4%, and 334 cases of left posterior, or 2.5%, making a total incidence of posterior positions of 12.8%. In addition to these, there were a considerable number which were classified in the records as right anterior, and undoubtedly a large number of these were in reality posterior at the beginning. It is interesting to note, in looking over the records, how many more right anterior positions are diagnosed by certain internes than by others. This is due, I believe, to the differing skill in vaginal examination. From these figures it will be seen that posterior positions are sufficiently numerous to warrant study, both as to diagnosis and treatment.

CAUSES—It is stated by some writers that the head normally enters the pelvic inlet in the transverse diameter, and that after the engaging surface has passed the inlet the occiput rotates either to the anterior or to the posterior. It may fairly be said that this opinion may still be open to some question. It is very difficult in most cases to determine exactly the moment when the head engages, and in fact usually by the time the examiner sees the patient, the position is determined.

Most of the authorities dismiss the etiology with a few brief and rather vague sentences; in fact some barely mention it. In my own experience, two conditions have so often been present in connection with these cases of posterior position, that I have been led to believe that they both may be causative factors.

In a very large proportion of these cases, the flexion of the head is not complete, and while the presentation is still a vertex, and not a brow, the head is almost at right angles to the shoulders, a position which has been aptly named "the military position". Of course, this deficient flexion is seen also in anterior positions, and is then a cause of dystocia, but I do not believe it is seen so often as in the cases of posterior position.

A second factor which is often operative is what I am in the habit of terming a "hard head"; i. e. a head more than usually ossified, with unyielding bones, and a very small anterior

fontanelle. Such heads do not mould well, and often cause prolonged labors. In my experience they are seen in the majority of the cases of posterior position.

It has been observed that some patients have repeated posterior positions, thus suggesting that there is some peculiarity in those individuals. What that may be, in most cases we cannot ascertain.

DIAGNOSIS—In speaking of the diagnosis and treatment, I shall speak in terms of a right posterior position, that being the most common. By substituting the word "left" for "right" the statements will apply equally well to left posterior positions.

On palpation, the back of the fetus is felt on the right, but more towards the flank than in case of an anterior position, and the small parts are more easily felt than usual. The cephalic prominence is felt on the right, and somewhat more prominently than usual, and it will be found frequently that the head is not firmly engaged, as engagement does not take place as early as in anterior positions. In general, it may be said that in the great majority of instances in which the back is on the right, the position is right posterior.

On vaginal examination, the posterior fontanelle is found directed toward the right sacroiliac joint and the anterior fontanelle toward the anterior left of the pelvis, the sagittal suture thus being in the right oblique diameter. Moreover, in many instances, as has already been mentioned, the flexion of the head is not as complete as usual, and the anterior fontanelle is therefore much more readily felt than normally. After labor has gone on for some time, especially if rotation is not progressing, there forms a thick caput which obscures the sutures and fontanelles, so that an accurate diagnosis is by no means as readily made as is indicated above. Indeed the most experienced examiner may be in doubt until he has introduced the entire hand into the vagina, and palpated the posterior ear and the occiput. Of course this can be done only under complete anesthesia.

By auscultation, the heart is best heard well over in the flank, in an entirely different position from that of its maximum intensity in the case of an anterior position. During labor, however, if normal rotation takes place, it is

very interesting to observe the change in the point of maximum intensity of the heart sounds from the flank to the anterior position of the abdomen, as the body of the fetus rotates.

MECHANISM—It is usually stated that the mechanism in posterior positions is exactly the same as in anterior positions, the only difference being that the occiput is required to rotate through an arc of 135 degrees instead of 45 degrees, i. e. from the sacro-iliac synchondrosis to the symphysis, instead of from the ileo-pectineal eminence to the symphysis. It is just this difference, however, that makes these positions so much more difficult for both mother and child. Various writers speak as if this rotation took place in most of the cases, but it is my own opinion, based upon observation, that this is not true. I am always surprised when a primipara is able to rotate a posterior occiput. If the occiput does rotate through this long distance, the remainder of the labor is in nowise different from that of an anterior position, which in fact it has now become. In some instances, the occiput rotates into the hollow of the sacrum, and the head may be expelled by the unaided forces of the mother, usually however with considerable damage to the maternal soft parts. At other times, the rotation begins, but does not progress farther than to bring the sagittal suture into the transverse diameter of the pelvis, and often not as far. The pains become ineffectual, and labor must be terminated by art. As has already been mentioned, the caput becomes very thick, so that the scalp appears at the vulva, while in reality the large diameter of the head is still high, thus leading one to believe that delivery will soon be accomplished. This incomplete rotation is in all cases due to faulty flexion. When flexion is normal, the occiput reaches the pelvic floor first, and is thus rotated to the anterior.

CLINICAL HISTORY—The progress of labor in these positions is quite different from that in anterior positions, and is so characteristic that one can almost make a diagnosis of the position in many cases without an examination. The membranes are apt to rupture early in the course of labor, due to the fact that the head does not fit as tightly into the inlet of the pelvis, in other words does not engage as firmly at the

beginning of labor, as in other positions. The contractions are short in duration, irregular, and not of great strength, and the labor is much prolonged, even in the cases which deliver themselves spontaneously. Because of these deficiencies in the contractions, the cervix dilates slowly, and often interference is demanded, for the sake either of the mother or child, before full dilatation has been reached. And this leads me to say that operative delivery is very often demanded, either because the mother is becoming exhausted, or because the child shows signs of prolonged pressure.

PROGNOSIS—As has been intimated, the prognosis will vary according as the occiput rotates to the front or fails in this rotation. In the former case, the danger to the mother is little if any greater than in a primary anterior position, although the labor is usually longer, and the patient is likely to become more tired. If, however, rotation fails, and delivery is by means of forceps, there is far more damage to the maternal soft parts, because the head is necessarily brought over a perineum which has not been prepared in the normal manner by prolonged pressure of the head. Likewise, the danger to the fetus is also increased, because the forceps are applied high up, and the head is subjected to much pressure during the extraction. In addition, during the application of the forceps, inasmuch as the head is often but poorly engaged, the cord may prolapse, and be pressed upon, and cause serious asphyxia or even the death of the fetus.

In the third form of termination of these cases, namely, by the rotation of the occiput into the hollow of the sacrum, the chief danger is to the perineum, due to the fact that the largest diameters of the head pass through the vulva. Instead of the suboccipito-bregmatic and the suboccipito-frontal, of nine and one half and ten centimeters, respectively, the occipito-frontal and the occipito-bregmatic, of ten and eleven and one half, respectively, emerge, and over-distend the perineum. There is also some added danger to the child, because of the prolonged labor.

Cragin gives the mortality as .3% for the mothers, and as 23.1% for the infants, and of the infants who died, about 60% were stillborn, due undoubtedly to the operative delivery.

We may therefore sum up the prognosis in the statement that the mortality of the mothers is practically nil, while that of the infants is large and worthy of serious thought.

TREATMENT—Most of the older writers, even down to the time of Lusk, well within the memory of many of us, in describing the operative delivery of these posterior positions, advise the extraction of the head with the face anterior. Some of them, it is true, speak of the possibility and even the advisability in certain selected cases, of rotating the head to the anterior position, either before or during the traction. In most cases this is said to be difficult, and is not advised. At the present day, however, it is recognized that the ideal termination of a posterior position is by its conversion into an anterior position, either by means of the maternal forces, or by the assistance of the obstetrician. To this end, it behooves the attendant to exercise the greatest patience, bearing in mind the fact that these cases are almost always prolonged, but that so long as neither the mother nor child show signs of exhaustion, there is no indication for interference. In many instances, even under favorable conditions, the labor will go on very slowly, the os dilating to admit two or three fingers, and then becoming rigid. It is then well to give the patient a hypodermic of a quarter of a grain of morphine, which will enable her to obtain two or three hours of refreshing sleep or at least some freedom from pain, and allow the uterus, tired out, to regain strength. The cervix often softens under the influence of the morphine, and on awakening, the pains recur with increased vigor, and the labor progresses to a favorable termination. In some cases, if the cervix is extremely rigid, and seems to be dilating very slowly, the insertion of a Voorhees bag will cause it to soften, and after the bag is expelled, the labor will proceed satisfactorily. It must be emphasized again that labor in posterior positions is commonly long and tedious, even if terminated spontaneously.

If, however, the occiput does not rotate at all, or rotates to the transverse position, and the mother or fetus begin to show the effects of the long fruitless labor, operative interference is demanded in the interest of both. The only patient whom I have seen die from

the exhaustion of labor was a woman who had been in labor seven days with an unrotated right posterior position. I mention this as an extreme instance of the danger of allowing these patients to try too long to deliver themselves, spontaneously. The cardinal principle in the operative delivery of unrotated posterior positions is the conversion of the posterior position to an anterior one. The head should never knowingly be delivered face to the pubis. I say knowingly, because most operators have extracted the head with the occiput persistently posterior, when it was thought that it had been converted into an anterior position. This will happen less and less frequently as the operator becomes experienced. There are two methods by which the head may be turned from a posterior position to an anterior. First, the forceps may be applied as nearly as possible to the sides of the head, and traction made until it impinges upon the floor of the vagina. Then, rotation may be accomplished somewhat as in a normal delivery, by means of the forceps, removing them when the rotation is nearly completed, and reapplying them and then effecting delivery as is usual in an anterior position. This method entails a considerable amount of risk of traumatism to the maternal soft parts, and although recommended by certain authorities, does not seem to me to be the best method. Much the better procedure is to rotate the head by the hand; the entire hand is introduced into the vagina, the head grasped as firmly as possible, and by a turn of the wrist the occiput can always be rotated into the desired position. At times it may be necessary to push the head up and disengage it, before rotation can be accomplished. This is especially true if the labor has gone on for some time, and the head, unrotated, is in sight, or near the perineal floor. In all cases, it is best to over-rotate, so to speak: i. e. in case of a right posterior, the occiput must be passed beyond the promontory of the sacrum, and converted into a left anterior; in case of a left posterior, it must be changed into a right anterior. If this is not done, the head is liable to slip back into its original position, during the application of the second blade of the forceps, when it is difficult to use the fingers in the vagina, as a guide. While the rotation is thus being accomplished by means of the hand

applied to the head, an attempt should be made by an assistant to turn the body in the same direction, by pressure along the back of the fetus. If these directions are followed, it will be found that the rotation can in most cases be accomplished without great difficulty; after the head has been super-rotated, as described, it will usually remain in the desired position, and forceps may then be applied precisely as in any anterior position.

This manoeuvre is, I believe, one of the greatest advances made in obstetrics in recent years. In place of nearly always dragging the head through the vulva with the occiput posterior, and always with lacerations of considerable severity, the delivery is usually easy, in fact often surprisingly so, and the lacerations not deep. During the delivery, if the perineum seems not very elastic, it is wise to do an episiotomy, either single or double. This will often save the patient from a much deeper tear.

In many instances it is true, vigorous traction is necessary, but it should be remembered that the head must be moulded, exactly as in a normal delivery, and that in a forceps delivery we commonly accomplish this moulding in a much shorter time than in a spontaneous birth.

SUMMARY—The points to which I desire especially to call your attention are:

1. The frequency of posterior positions.
2. The mechanism—deficient flexion.
3. The distinctive character of the labor.
4. The serious prognosis for the infant.
5. The treatment by manual rotation of the head, followed by delivery with forceps.

DISCUSSION OF DR. PARTRIDGE'S PAPER.

DR. R. H. CARVER, Providence, R. I.—Dr. Partridge has given us such an exhaustive paper that I do not think there is anything to add. He has already covered the ground very thoroughly.

The subject is an important one as the condition is frequently met with in practice, and if not properly treated will subject the woman to a great deal of unnecessary suffering, and shock, traumatism and invalidism, and endanger the child. Probably one-half of the cases that I see in consultation are posterior positions, usually R. O. P. The text-books state that most of these posterior positions

rotate spontaneously sometime during labor to the anterior position. That does not accord exactly with my experience; there are certainly a great many that do not rotate.

It is only in comparatively recent years that operative interference for the relief of this condition has received much attention except by specialists.

It is the tendency now more than formerly to try to save suffering for the lying-in woman. A posterior position which does not rotate means a long, exhausting and painful labor with bad lacerations. Much of this can be prevented by timely interference. After the os has become well dilated or dilatable and the pains have continued for two hours without advancing the position of the child, I believe it will be to the advantage of both mother and child to rotate the head and deliver the child with forceps. If the head is floating above the brim it will usually be better to do a podalic version.

It is singular how many writers and text-books advocate the Scanzoni method of rotating the head—that is, with the forceps. It is safer and more satisfactory to rotate with the hand and it can almost always be done. If the rotation is done with the hand the head can be placed exactly where we want it, the hand passed over the occiput, the head firmly flexed and the face pressed down to the right of the promontory, if it be a R. O. P. If done in that way the head will almost always stay rotated. If rotated with the forceps, the head is less likely to stay in position. It is not often necessary to pass the hand beyond the head and rotate the body, a procedure which may be followed by the funis coming down and which adds a serious complication. Some writers advocate rotating the head under ether and then leaving the case to progress as a normal labor. I have never done this but I feel sure that the head would return to the posterior position, necessitating another etherization and replacing the head and delivery by the forceps.

There is nothing in obstetrics that yields more satisfactory results than the proper management of occiput posterior positions and it seems to me that more consideration should be given to it in the text-books and in the schools.

THE RHODE ISLAND MEDICAL JOURNAL

Owned and Published by the Rhode Island Medical Society

Issued Monthly under the direction of the Publication Committee

ROLAND HAMMOND, M. D., *Editor*
219 Waterman Street, Providence, R. I.

W. A. RISK, M. D.
Business Manager
219 Waterman Street
Providence, R. I.

WILLIAM F. BARRY, M. D.
ASA S. BRIGGS, M. D.
ALEX M. BURGESS, M. D.
CHARLES S. CHRISTIE, M. D.
JOHN E. DONLEY, M. D.
J. W. LEECH, M. D.
NORMAN M. MACLEOD, M. D.
F. T. ROGERS, M. D.

*Associate
Editors*

Committee on Publication

ROLAND HAMMOND, M. D., *Chairman*
F. T. ROGERS, M. D.
W. A. RISK, M. D.
JOHN M. PETERS, M. D.
J. W. LEECH, M. D.

Editorial Correspondence, Books for Review and Exchanges should be addressed to the Editor; Advertising Correspondence to the Business Manager.

Advertising matter must be received by the 10th of the month preceding date of issue.

Advertising rates furnished upon application, to the business manager, W. A. Risk, M. D., 219 Waterman Street, Providence, R. I.

Reprints will be furnished at the following prices, providing a request for same is made at time proof is returned: 100, 4 pages without covers, \$6.00; each additional 100, \$1.00. 100, 8 pages, without covers, \$7.50; each additional 100, \$2.80; 100, with covers, \$12.00; each additional 100, \$4.80. 100, 16 pages, without covers, \$10.50; each additional 100, \$3.00; 100, with covers, \$16.00, each additional 100, \$5.50

SUBSCRIPTION PRICE, \$2.00 PER ANNUM. SINGLE COPIES, 25 CENTS.

Entered at Providence, R. I. Post Office as Second-class Matter.

RHODE ISLAND MEDICAL SOCIETY

Meets the first Thursday in September, December, March and June

JOHN M. PETERS	<i>President</i>	Providence
JESSE E. MOWRY	<i>1st Vice-President</i>	Providence
HERBERT TERRY	<i>2d Vice-President</i>	Providence
JAMES W. LEECH	<i>Secretary</i>	Providence
HENRY J. HOYE	<i>Treasurer</i>	Providence

DISTRICT SOCIETIES

KENT

Meets the second Thursday in each month

FRANK B. SMITH	<i>President</i>	Washington
J. F. ARCHAMBAULT	<i>Secretary</i>	Arctic

NEWPORT

Meets the third Thursday in each month

A. F. SQUIRE	<i>President</i>	Newport
A. CHACE SANFORD	<i>Secretary</i>	Newport

R. I. Ophthalmological and Otological Society—2d Thursday—October, December, February, April and Annual at call of President
Dr. Frank J. McCabe, President; Dr. C. J. Astle, Secretary-Treasurer.

PAWTUCKET

Meets the third Thursday in each month excepting
July and August

E. J. MATHEWSON	<i>President</i>	Pawtucket
CONRAD E. THIBODEAU	<i>Secretary</i>	Pawtucket

PROVIDENCE

Meets the first Monday in each month excepting
July, August and September

DENNETT L. RICHARDSON	<i>President</i>	Providence
RAYMOND G. BUGBEE	<i>Secretary</i>	Providence

WASHINGTON

Meets the second Thursday in January, April,
July and October

JOHN CHAMPLIN	<i>President</i>	Westerly
W. A. HILLARD	<i>Secretary</i>	Westerly

WOONSOCKET

Meets the second Thursday in each month excepting
July and August

J. A. KING	<i>President</i>	Woonsocket
THOMAS F. BAXTER	<i>Secretary</i>	Slater'sville

EDITORIALS

THE MILK CAMPAIGN.

Physicians should interest themselves in the campaign which has recently been inaugurated for preserving the standard of milk in this state. Of the many topics which will be brought out in the discussion, two, at least, are deserving of earnest consideration by the medical profession.

There is imminent danger that the fight to maintain the present standard of milk in this community will be lost. More samples of low

standard milk have been taken in this state during the past year than for some time previously. There is an attempt to evade the law by certain producers and to foist an unclean and dangerous product upon the innocent consumer. The lessons of the famous fight of the Providence Housewives League several years ago in behalf of the enforcement of the present milk law are likely to be forgotten unless the public is awakened to a realization of conditions at present existing in the dairy industry.

The public should be encouraged to drink more milk in spite of the prevailing price. The

production of milk in this state is rapidly falling off, and owing to the present high prices of feed and labor, dairy herds are being broken up and sold. Dairymen are becoming discouraged, and there is a likelihood that the production of our most important article of diet will be seriously jeopardized. It is superfluous to point out to the reader of these lines the value of milk as a food for both young and adult. In his daily rounds the physician can do a valuable bit of missionary work in encouraging the wider use of clean milk at this critical period in the industry. He should also lend his aid in supporting the meetings in connection with this campaign for milk betterment.

THE WORKINGS OF THE MARYLAND PLAN.

On another page appears the report of the transactions of the April meeting of The Washington County Medical Society. At that meeting a resolution was passed requesting each member of the Society to report to the Secretary, on the status of his financial relations with service men. At the outbreak of the war most societies passed resolutions adopting The Maryland Plan or some modification of it. How well it was lived up to seems to be a question. Obviously during the pandemic of influenza just preceding the armistice, and for three months after, when the largest number of physicians were in service, medical work in civil life was in a very abnormal state and the doctor treated all sorts and conditions of patients, in a feverish haste to be of the greatest assistance to the largest number of people, often without knowing whose patients he was treating. It is plain that to have lived up to the letter of the law would have required a complicated set of accounting which would have seemed like the last straw. Granting that abnormal conditions and the stress of unprecedented demands for doctors are not valid reasons for failing to meet an honorable obligation, is it not wiser to let the accountings under The Maryland Plan remain a question of personal honor rather than to demand an investigation of a question both delicate to handle and difficult to interpret.

A skilled mechanic stayed at home in safety and made unheard of wages, while a fellow

workman was sent to a front line trench to risk his life at a compensation not worth mentioning. A contractor built for the government on a "cost-plus" basis and now rides exclusively in a high powered limousine, while many a conscientious doctor did yeoman service on a draft board for no pay whatever. "C'est la guerre."

THE COUNCIL OF MEDICAL EDUCATION.

To many of the busy practitioners of medicine the Council of Medical Education is no more than a name. The achievements of this body, however, have been most notable and should be known by all who are interested in the advances in medicine. When the Council started its investigations in 1904 and 1905, it had one ideal to which it intended to cling, namely, that each school should require two years of premedical work and then give a four years course in medicine and finally require one year of hospital work before granting the degree. This ideal has practically been attained because whereas in 1905 there were only 5 of the 162 schools that insisted on these requirements, in 1919 there were 79 of the 85 schools that had agreed to adopt the suggestions of the Council. Furthermore the elimination of the many undesirable schools that was brought about by their survey and by their classification into the A, B and C schools has done much to put medical education on a higher level. In the first survey it was discovered that 40 of the 162 schools had no laboratories at all, but at the present time there is no school that does not have at least three laboratories. It was thought by many that the elimination of so many schools would tend to lead to a dearth of physicians, but such has not been the case, for there is one physician to every 720 people in the United States, whereas in England the proportion is one to 1500.

Because of the work of the Council in stimulating medical progress in the United States, the medical schools have a wonderful opportunity. In former years it was considered necessary to spend some time on the continent, especially in Germany, if one was to consider his medical education complete. It seems as if the time is now at hand when a year or more at one of our large medical centres will be considered not only

essential for the completion of our medical education, but also necessary for our medical brethren from overseas.

SOCIETY MEETINGS

WASHINGTON COUNTY MEDICAL SOCIETY.

The regular quarterly meeting of the Washington County Medical Society was held at the Colonial Club, Westerly, Thursday morning, April 8, 1920.

The feature of this meeting was an illustrated address by Dr. Frank E. Peckham, of Providence, on the subject of "Fractures."

The attention of the Society was called to the fact that the provisions of the vote passed April 12, 1917, regarding taking care of the practices of those members who went into Government service, had not been lived up to and the Secretary was instructed to send a copy of this vote to each member, with a request to report to the Secretary as to how faithfully he had lived up to the regulations contained in said vote.

One application for membership was received. Adjourned and dined.

W. A. HILLARD, M. D., *Secretary*.

PROVIDENCE MEDICAL ASSOCIATION.

March 1, 1920.

The regular monthly meeting of the Providence Medical Association was called to order in the Medical Library by President D. L. Richardson on March 1, 1920, at 8:50 p. m.

The records of the previous meeting were read and approved.

The President announced that Dr. William R. White and Dr. Charles H. French had been appointed a committee to draw up a memorial on the death of Dr. Frank B. Fuller, after which Dr. William R. White read the memorial.

Dr. C. H. Leonard moved that the memorial be approved by a rising vote, seconded, and rising vote given.

The first paper, "Albuminuria in Nephritis, Significance and Treatment," was read by Dr. Herman J. Mosenthal of New York.

The second paper, "Non-Nephritic High Blood Pressure," was read by Dr. James C. O'Hare of Boston.

Both papers were very instructive and most enthusiastically received by the members.

The discussion was opened by Dr. Frank T. Fulton, and Dr. Mosenthal and Dr. O'Hare closed the discussion of their respective papers.

Dr. William R. White moved that a vote of thanks be given to the speakers of the evening, seconded by Dr. Burge, and passed.

Dr. Leonard moved that a copy of the memorial to Dr. Fuller be sent to the family, and passed.

There being no further business, the meeting adjourned on the motion of Dr. Burge at 10:45 p. m.

Attendance: 88 members and 6 guests.

Collation was served.

Respectfully submitted,

RAYMOND G. BUGBEE, M. D.,

Secretary.

HOSPITALS

MEMORIAL HOSPITAL.

The regular meeting of the Memorial Hospital Staff Association was held in the Out-Patient Building, March 30, 1920, at 8:45 p. m. The President of the Staff Association, Dr. J. A. Remington, was in the chair. In the absence of the Secretary, the business session was omitted.

There were present Drs. Abbott, Peckham, Remington, Jones, Oulton, Hammond, Holt, Harris, Munro, Wheaton, Hawkins and Dowling.

Dr. Rowland Hammond presented numerous lantern slides illustrating the work of the Military Orthopedic Hospitals in the British Isles.

The subject was discussed by Drs. Peckham, Jones and Remington.

RHODE ISLAND HOSPITAL.

The annual banquet of the Rhode Island Hospital Club was held at the Wannamoisett Club, April 14, 1920, at 6:30 p. m. Approximately 100 members and guests were present. The President of the Club, Dr. William B. Cutts, acted as toastmaster.

The speaker of the evening, Mr. Hector MacQuarrie, gave an interesting description of life in Tahiti, one of the French Society Islands in the Southern Pacific. The talk was interspersed with spicy anecdotes and pungent reminiscences of a little known portion of the globe.

Musical selections by Messrs. Alfred G. Chaffee and Muldrew added to the enjoyment of the evening.

The regular meeting of the Rhode Island Hospital Staff Association was held at the Hospital, April 12, 1920, at 8:30 p. m. Routine business was transacted.

Dr. Harold Johnson and Dr. Frank Matteo completed their internship at the Rhode Island Hospital on April 1, 1920.

Dr. Matteo has opened an office on Broadway, Providence, R. I.

The following men began their internship on April 1, 1920: Drs. John Oslin, Russell Smith, Bahnsen Weathers and William Murphy.

Miss Inez C. Lord, Superintendent of Nurses, and Miss Amy Allison, Instructor of Nurses, have been at Atlanta, Ga., attending a convention of the American Nurses' Association.

ST. JOSEPH'S HOSPITAL.

A regular meeting of the St. Joseph's Hospital Staff Association was held at the Rhode Island Medical Society Library, March 24, 1920, at 8:30 p. m. About 60 members and guests were present.

Paper by Dr. M. J. O'Shaughnessy, entitled "Diseases of the Thyroid Gland." The paper was an interesting account of personal experiences with thyroid cases in the goitre district of Minnesota.

A regular meeting of the St. Joseph's Hospital Staff Association was held at the Rhode Island Medical Society Library, April 9, 1920, at 8:30 p. m. Approximately 45 members and guests were present.

Paper by Dr. Henry Viets of Boston, entitled "Spinal Cord Injuries and their Importance in Prognosis in Urological Cases," with report of twenty war cases.

MISCELLANEOUS

DR. WILLIAM J. BURGE,

On his 89th Birthday.*

BY WILLIAM R. WHITE, M. D.,
Providence, R. I.

From dates and records it appears
You, sir, have lived a lot of years.
Indeed, as science reckons time
Your years now number four score nine.

(*Read at a dinner in celebration of Dr. Burge's anniversary, April 12, 1920.)

We youngsters, some of us at least,
Now present at this birthday feast,
Ourselves acknowledge three score ten,
The number fixed for average men.

But who of us will see the time
We can look back on eighty-nine,
And if we do we know it's true
We can't be in the class with you.

Perhaps on us a joke you've sprung
And really are a man quite young.
Indeed this might to us seem true
When we just take a look at you.

Your ruddy face, your rounded cheek,
Do not your many years bespeak.
Your form erect, your springy step
Suggest much strength and vigor yet.

Why count the years, What is man's age?
Is spirit not the rightful gauge?
Think not, dear friend, of eighty plus,
All hail! to-night you're one of us.

If 'leven years from now we meet
And once again each other greet,
May we find you on deck once more,
As young as now at full five score.

But doctor dear, it's yours to give
Some sound advice as how to live
That one may pass a long life through
And find himself as we find you.

So modest you, perhaps you'll balk
And of yourself refuse to talk;
But you to us have been well known
So we can make some points our own.

And first of all it's understood
You came of stock both clean and good;
As child you surely were not spoiled;
By vice in youth you were not soiled.

And then as man, what each here knows,
'Twas our profession that you chose!
To prove you met its great demands
Your brilliant record by you stands.

On land or sea, in war or peace,
Your earnest efforts did not cease.
You faltered not, you practiced well,
Which fact it's my delight to tell.

'Twas yours at times to join in strife,
Again to share the joys of life;

You've known the benefit it brings
To soften care by lighter things.

Life's funny side, the yarn, the joke,
The pipe or the cigar you smoke,
The comforts of your happy home,
The love of kindred you have known;

The gentle clasp of grandchild's hands,
Around your life have woven bands;
And childish voices songs have sung
Which must have helped to keep you young.

Thus while your life's long road you've trod
You've served mankind, your church, your God.
Your life's beginning has been here,
Eternity brings you no fear.

And now at age of four score nine
What wealth of memories must be thine.
What blessing that you gift retain
Life's pictures to review again.

Forget the sorrows, trials, grief
Triumphant in the grand belief
And dearest thought that words can tell,
Our Father doeth all things well.

As nineteen twenty rolls along
May each day find you going strong.
On no account may we be told
That Doctor Burge is growing old.

Though April twelfth of twenty-one
In course of time will surely come,
And you, good man, must answer then
The roll call numbered four score ten.

Accept the honor, have no fears,
Be burdened not by all those years;
Life's measured not by simple length,
What count are courage, health, and strength.

Just pass your time as would seem best
With alternating work and rest,
And walk and talk and sleep and dream
Of what you've done and heard and seen.

Most earnestly I now declare
Your host of friends from everywhere
On each recurring natal date
With love will you congratulate.

So comrade, brother, truest friend,
We'll help each other till the end.
Whatever age you may attain
May you be free from wearing pain.

Of our own strength we cannot stand,
But in the hollow of His hand
Who rules the life of every man
By His divine and loving plan.

We know the hope and faith are yours,
The faith that over all endures,
When summoned hence you'll ready be
To say "I come, Thou ledest me."

CANCER IS INCREASING.

Cancer, probably the most dreaded of all diseases, is on the increase in America and throughout the world in spite of the fact that it is curable if treated early. In its death toll in the United States cancer already ranks among tuberculosis, pneumonia, heart disease and diseases of the kidney, and it is much more feared than any of these. This is because of the ignorance of the public, the difficulty of detecting a cancer in its early stages and the fact that when it has reached the recognizable stage it has gone beyond the curable stage.

The medical world today believes that work for the control of cancer should be largely similar to that so successfully carried on in tuberculosis; that is, it should consist mainly in widespread education of the general public to recognize cancer in its precancerous state, it should train the people at the first alarm to seek the advice of a competent physician, and it should keep the public freely advised of the latest scientific knowledge concerning cancer, its causes, prevention and cure.

The first and most important requirement in such a campaign of education is that the public change its viewpoint. The United States Census Bureau for 1917 gave a total of 61,452 deaths from cancer as compared with 112,821 from pneumonia, 110,285 from tuberculosis, 115,337 from heart disease and 80,912 from kidney diseases. So it will be readily seen that cancer already ranks among the leading causes of death in this country.

Cancer is apparently increasing. The recorded death rate shows about two and one-half per cent. more cases every year. It has risen from 62.9 deaths per 100,000 of population in 1900 to 81.6 in 1917. Some of this increase is unquestionably due to an improvement in recording and gathering vital statistics and to better diagnosis, but it is generally believed that these factors do not alone account for the increase.